



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,771	03/24/1999	MASAHIRO SHIOJI	990306	8875

23850 7590 02/27/2004

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

TRAN, NHAN T

ART UNIT PAPER NUMBER

2615

DATE MAILED: 02/27/2004

20

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/274,771

Applicant(s)

SHIOJI, MASAHIRO

Examiner

Nhan T. Tran

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-7,9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 12/3/2003 have been fully considered but they are not persuasive. The Examiner respectfully submits the following explanations:

Upon further reconsideration, the Examiner believes that the claimed limitation "said image display means do not simultaneously display both images obtained from the normal pickup mode and the continuous image pickup mode" reads on col. 15, lines 18-23 and Figs. 5, 69 & 88 in Kuba reference. Therefore, Kawamura reference is not necessary to be included in the rejection. In col. 15, lines 18-23, Kuba clearly teaches that when reproducing image data, it may be desired not only to successively reproduces files A to C (normal or single picked up images) in the root directory but also to reproduce only the classified image data files E, F and G (continuously picked up images). In such a case the subdirectory c can also be selected for reproduction. By doing so, an intended image can be reproduced quickly. Please note in Figs. 69 and 88 that the root directory is used to store normal or single picked up images while the subdirectory is used to store continuously picked up images. It is clear that the teaching in col. 15, lines 18-23 and Figs. 69 and 88 enables an alternative display method to display only images obtained in normal image pickup mode in one separate image index and also to display only images obtained in continuous image pickup mode in another separate image index, or at least the display is enabled to display the above different types of images together in one mode or separately in another mode when selected. Such a teaching not only meets the above claimed

Art Unit: 2615

limitation but also encompasses the limitation "third selecting means" and "predetermined images in respective image groups" as argued by the Applicant on page 12.

In view of the above, the Examiner believes that the interpretation of the present claimed invention does read on the cited references at least for the reasons discussed above and as stated in the following Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 recites the limitation "said image display means" in line 10. There is insufficient antecedent basis for this limitation in the claim.
3. Claims 9, 11-14 are also rejected as being dependent of claim 7.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2615

4. Claims 1, 3-7, 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuba et al (US 5,806,072) in view of Anderson (US 6,278,447).

Regarding claim 1, Kuba discloses a digital camera that has a normal pickup mode (single pick-up mode) in which images of an object are picked up one by one, a continuous image pickup mode in which images of an object are picked up continuously (see Fig. 25), a normally picked up image reproduction mode in which an image picked up in the normal image pickup mode is reproduced and a continuously picked up image reproduction mode in which an image picked up in the continuous image pickup mode is reproduced (see Figs. 21 & 65; col. 20, lines 47-56 & col. 22, lines 5-14), comprising:

memory means for storing an image (see col. 21, lines 4-12);

image display means for displaying an image (see Figs. 21(A) & (B); col. 21, line 65 – col. 22, line 4);

first writing means for storing each image picked up in the normal image pickup mode (independent data) in the memory means (see col. 21, lines 47-60);

second writing means classifying into groups and storing in the memory means a plurality of images picked up in the continuous image pickup mode, session by session (see Figs. 5 & 88);

first selecting means (11b, 11c) for selecting, in the normal picked up image reproduction mode, a desired image among images stored in the memory means (see Figs. 3-6; col. 16, lines 9-15 for selection of frame, such as a single image frame of file A, B or C in the root directory);

Art Unit: 2615

second selecting means (11d, 11e) for selecting, in the continuously picked up image reproduction mode, a desired image group (i.e., the image group 32 or 28 as shown in Figs. 25(A) & (B) and 21(A) & (B)) among image groups stored in the memory means, and a desired image (i.e., 33 or 34) among the plurality of images belonging to the image group (see Figs. 69 & 88; col. 15, lines 18-23 for selection of a directory, such as subdirectory 01 where stored continuous picked up image data are selected for reproducing);

first reading means for taking out the images selected by the first and second selecting means from the memory means and applying the image to the image display means (see col. 21, line 61 – col. 22, line 14).

the second selecting means selects the image group by selecting a desired reduced image from the predetermined number of reduces images displayed on the image display means (see Figs. 21 and 25);

Kuba clearly teaches, in Fig. 5; col. 15, lines 18-23, that when reproducing image data, it may be desired not only to successively reproduces files A to C (normal or single picked up images) in the root directory but also to reproduce only the classified image data files E, F and G (continuously picked up images). In such a case the subdirectory c can also be selected for reproduction. By doing so, an intended image can be reproduced quickly. Please note in Figs. 69 and 88 that the root directory is used to store normal or single picked up images while the subdirectory is used to store continuously picked up images. It is clear that the teaching in col. 15, lines 18-23 and Figs. 69 and 88 enables an alternative display method to display only images obtained in normal image pickup mode in one separate image index and also to display only images obtained in continuous image pickup mode in another separate image index, or at least

Art Unit: 2615

the display is enabled to display the above different types of images together in one mode or separately in another mode when selected. Such a teaching only meets the claimed limitation “said image display means do not simultaneously display both images obtained from the normal pickup mode and the continuous image pickup mode” but also encompasses the limitation “third selecting means for selecting, in the continuously picked up image reproduction mode, a predetermined number of reduced images among reduced images of predetermined images in respective image groups stored in the memory means.”

a second reading means for reading the prescribed number of reduced images selected by the third selecting means from the memory means, forming an image of one plane from the predetermined number of reduced images, and applying the image to the image display means (see Fig. 65; col. 32, lines 25-27 for continuous play mode); wherein the second selecting means selected the image group (i.e., 2 8) by selecting a desired reduced image from the predetermined number of reduced images displayed on the display means (Fig. 21(B) and col. 15, lines 18-23).

Kuba does not teach that a reduced image of each image is stored together with each image in memory means. Anderson teaches a conventional image file stored in a memory wherein both a reduced image and its corresponding regular image are stored in the same file (see Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art to enable the second writing means to form a reduced image of each image and stores the reduced image together with each image to the memory means in a conventional way as taught by Anderson so that the time for playing back images would be reduced since both reduced and regular images were stored in the same file in memory means.

Regarding claim 3, Kuba also discloses the digital camera that has a continuous reproduction mode (continuous play) in which a plurality of images belonging to a selected image group are continuously reproduced (see Fig. 65; col. 32, lines 25-26), and

third reading means for taking, in the continuous reproduction mode, a plurality of images belonging to the image group selected by the second selecting means and continuously applying the images to the image display means (see Fig. 68; col. 34, lines 11-32).

Regarding claim 4, the digital camera also has a moving mode for moving an image (Fig. 32(A)-(C)), and the camera comprises:

moving means for physically rearranging a plurality of predetermined data records within the storage medium (as shown in Fig. 32). The data rearrangement shown by Fig. 32 clearly presents extracting an image selected by the second selecting means from the image group to which the image belongs, and storing the extracted image to the storing means of the same directory as with an image pickup in the normal pickup mode (see col. 24, lines 22-37).

Regarding claim 5, Kuba further discloses that the digital camera has a copy mode for copying an image and comprises:

copying means for copying image data files within the storage medium (as shown in Fig. 60 & 130). This clearly presents copying means for forming a copy image of an image selected by the second selecting means and storing the copied image in the memory means of the same



Art Unit: 2615

directory as for an image picked up in the normal image pickup mode (see col. 31, lines 14-29 & col. 47, lines 27 & 44-46).

Regarding claim 6, the digital camera of Kuba also has a deletion mode (DEL) for deleting stored image data (see Fig. 36), comprising:

first deletion means for deleting the image selected by the first and second selecting means among images stored in the memory means (col. 26, lines 28-29);

inherent second deletion means for deleting an image group selected by the second selecting means among image groups stored in the memory means (col. 26, lines 28-29). Since the image groups are constructed with the hierarchical directory and tree display method, it is inherent for the image group to be deleted in such the camera system.

Regarding claim 7, the claimed limitations are analyzed with respect to claim 1, wherein storing means where directories are formed for storing files of picked up image data in the memory means and store each of images picked up in the normal image picked up mode (independent data) in one of the directories (i.e., A, B or C), and classify into groups (i.e., subdirectories b, c) and then store a plurality of images picked up in the continuous image pickup mode (group data), session by session of continuous image pickup, in another of the directories (see Figs. 5, 69 & 88; col. 21, lines 46-65).

Regarding claim 9, the claimed limitations are analyzed with respect to claim 1.

Art Unit: 2615

Regarding claim 11, the claimed limitations are analyzed with respect to claim 3.

Regarding claim 12, the claimed limitations are analyzed with respect to claim 4.

Regarding claim 13, the claimed limitations are analyzed with respect to claim 5.

Regarding claim 14, the claimed limitations are analyzed with respect to claim 6.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2615

NT.

A handwritten signature in black ink, appearing to read 'Andrew Christensen', is written over the printed name.

ANDREW CHRISTENSEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600